

Title (en)

CONTROL DEVICE, CONTROL METHOD, AND PROGRAM

Title (de)

STEUERUNGSVORRICHTUNG, STEUERUNGSVERFAHREN UND PROGRAMM

Title (fr)

DISPOSITIF DE COMMANDE, PROCÉDÉ DE COMMANDE ET PROGRAMME

Publication

EP 4142307 A4 20231018 (EN)

Application

EP 20931976 A 20200813

Priority

- JP 2020076221 A 20200422
- JP 2020030824 W 20200813

Abstract (en)

[origin: EP4142307A1] A control device (10) includes: a difference calculator (12) that calculates a maximum gain difference between frequency characteristics of an audio signal and desired frequency characteristics in a predetermined frequency band; a center frequency calculator (13) that calculates a center frequency between a first frequency at which a gain difference between the frequency characteristics of the audio signal and the desired frequency characteristics is $1/\sqrt{2}$ times the maximum gain difference and which is closest to a peak frequency at which the maximum gain difference is obtained among one or more frequencies lower than the peak frequency and a second frequency at which a gain difference between the frequency characteristics of the audio signal and the desired frequency characteristics is $1/\sqrt{2}$ times the maximum gain difference and which is closest to the peak frequency among one or more frequencies higher than the peak frequency; a determiner (15) that determines parameters of an equalizer (20) based on the maximum gain difference and the center frequency; and an outputter (16) that outputs the parameters to the equalizer (20).

IPC 8 full level

H04R 3/04 (2006.01); **H03G 5/02** (2006.01)

CPC (source: EP US)

H03G 3/3005 (2013.01 - US); **H03G 5/165** (2013.01 - EP); **H04R 3/04** (2013.01 - EP US); **H03G 2201/103** (2013.01 - US); **H04R 2430/01** (2013.01 - US); **H04S 7/307** (2013.01 - EP)

Citation (search report)

- [I] JP 2007206636 A 20070816 - YAMAHA CORP
- [I] JP 2007295528 A 20071108 - SONY CORP
- [A] US 2005190930 A1 20050901 - DESIDERIO ROBERT J [US]
- See also references of WO 2021215025A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 4142307 A1 20230301; **EP 4142307 A4 20231018**; JP 7450196 B2 20240315; JP WO2021215025 A1 20211028; US 11955939 B2 20240409; US 2023033959 A1 20230202; WO 2021215025 A1 20211028

DOCDB simple family (application)

EP 20931976 A 20200813; JP 2020030824 W 20200813; JP 2022516829 A 20200813; US 202017791776 A 20200813